

AMENDMENTS TO THE DRAWINGS:

The attached sheets of drawings includes changes to Figures 3-6. Each new sheet replaces the original sheet.

In Figure 2 of sheet 1/3, the reference number 5, and the corresponding leader line, are moved upward so as to generally indicate the apparatus including elements 6, 7, and 8.

In Figure 4 of sheet 2/3, the reference number 16, and the corresponding leader line, are removed.

In Figure 6 of sheet 3/3, the reference number 18, and the corresponding leader line, are removed.

Attachment: Replacement Sheet(s)

REMARKS

The application has been amended and is believed to be in condition for allowance.

Claims 16-18, 20-22, and 24-30 remain in this application.

Claims 18 and 23 are cancelled without prejudice.

Dependent claims 31-37 are new and recite features removed from their respective parent claims. The new claims find support in the specification, drawing figures, and claims as originally filed and do not introduce new matter.

Formal Objections to the Disclosure

The Official Action objected to the specification. The Official Action stated that the specification should be revised in order to comply with 35 USC 112, first paragraph citing grammatical errors and lack of use of idiomatic English.

In particular, the Official Action objected to the specification, stating that the reference number 10 is used to refer to both a "mandrel" and a "former", the terms also being used interchangeably throughout the specification.

The Official Action further objected to the specification stating that the reference numbers 2 and 3 are used for multiple parts.

The Official Action yet further objected to the specification stating that the sides (part 16) are labeled in Figure 6, but not mentioned in the description of the drawing in the specification.

In reply, the specification has been amended to overcome the Official Action's objections. In particular, the specification is amended to describe elements 3 and 4 exclusively as a concave arched panel and a convex arched panel, respectively, and the body 15 of section 14 has been revised to read as "a portion 15".

Withdrawal of the objection to the specification is respectfully requested.

The Official Action objected to the drawing figures, stating that reference character "10" has been used to designate both a "former" and a "mandrel".

The Official Action further states that reference character "2" has been used to designate the bent front edge, curved region, curved front edge and convex arched top surface, wall free end, and top wall.

The Official Action yet further states that reference character "3" has been used to designate the concave arched panel, arched panel, bottom wall, free wall end, and concave arched bottom surface.

The Official Action yet further states that reference characters "2" and "3" have both been used to designate the free end of the walls.

The Official Action yet further states that the associated part for label 5 in Figure 2 is unclear.

In reply, the specification has been amended, as indicated above, to overcome the Official Action's objections to the drawings. Also, Figures 4 and 6 are amended to remove reference number 16 and number 18, respectively, and Figure 2 is amended so that reference number 5 more generally indicates the edge press, which comprises base 6, rubber cushion 7, and pressing member 8 (see specification, page 3, lines 12-13).

It is respectfully submitted that the amendments to the specification are non-substantive and limited to grammatical and idiomatic revisions, and that no new matter is introduced by way of these amendments.

Withdrawal of the objection to the drawing figures is respectfully solicited.

The Official Action objected to claim 16, stating that shaped sheet (1') is referenced in the claim, but not present in the specification of the drawing figures.

The Official Action objected to claim 23, stating that a multiple dependent claim cannot depend from another dependent claim, and further that the claim depends from a canceled claim.

The Official Action objected to claims 16-30, stating that the claims contain multiple inconsistencies between labels and figures as presented in the claims and the specification and drawing figures.

In reply, the claims have been generally amended to overcome the Official Action's objection. No new matter is introduced by way of these amendments to the claims.

Withdrawal of the objection to the claims is respectfully solicited.

Formal Rejections - Section 112, second paragraph

The Official Action rejected claims 18, 21, and 24 under 35 USC 112, second paragraph as being indefinite for the use of exemplary language.

The Official Action rejected claim 23 under 35 USC 112, second paragraph, stating that the claim is vague and fails to further describe or identify the claimed invention, and further states that it is unclear what the "body" in the claim language refers to.

In reply, the claims 18, 21, 22, and 24 have been amended to overcome the Official Action's objection. In particular, claim 22, amended to include the subject matter of former claim 23 (presently cancelled), recites element 15 as a portion of the section 14, as illustrated in Figure 6 and described in the amended paragraph of the specification beginning page 3, line 30.

The amendments to the claims do not introduce new matter. Withdrawal of the objection to the claims is respectfully solicited.

Substantive Rejections - Section 103

The Official Action rejected claims 16-20, 22-26 under 35 USC 103(a) as being unpatentable over Clarke (US 3,057,393; "C '393") in view of Clarke et al. (US 3,045,327; "C '327").

As to claim 16, the Official Action acknowledges that C '393 fails to teach or suggest a step including a rubber cushion. The Official Action offers C '327 as teaching this feature.

In reply, it is firstly noted that claim 16 has been amended. It is respectfully submitted that neither C '393 nor C '327, individually or in combination, teach or suggest each of the steps recited in amended claim 16.

In particular, C '393 and C '327 fail to teach or suggest all of i) bending a sheet and forming two panels, ii) forcing a pressure member of an edge press towards a rubber cushion with the bent sheet being enclosed between the pressure member and the rubber cushion to deform said sheet between the former and the rubber cushion to produce a shaped sheet, iii) placing the shaped sheet in a rubber press with a bottom block having a cavity with a shape that corresponds to an external shape of one of the two panels of the shaped sheet, and iv) pressing the shaped sheet with the former between the bottom block and a rubber mat to produce a semi-finished product.

C '327 teaches the use of a rubber cushion 26 in deep drawing a sheet metal blank 10 by means of a die 20. The action of the rubber cushion 26 forces the stretched blank 10 to lie against the male die 20 while the blank 10 is being stretched (column 1, lines 63-65). Hence, the bent sheet 10 achieves the form shown in Figure 6 (column 2, lines 4-5).

C '327, however, fails to teach or suggest a step of placing the blank 10, formed by the die 20 and rubber cushion 26, into a rubber press with a bottom block having a cavity with a shape that corresponds to an external shape of one of two panels of the formed blank, and pressing it, with the former between the bottom block and a rubber mat, to produce a semi-finished product.

On the contrary, C '327 teaches that formed plate 10 is positioned on another mandrel 30 and pressed upon by a die 32 (column 2, lines 4-9; Figure 7). There is no teaching of a former (the same former of a prior pressing step) and a rubber mat being present, as required by claim 16. As shown by Figure 7, there is disclosed only an edge press or mandrel 30, and no rubber cushion. Further, the die 32 provided with the mandrel 30 in Figure 7, fails to suggest either a rubber mat or a former, the former having been removed with the sheet from an edge press after a forcing and deforming step (see claim 16, and also page 2, lines 1-8 of the specification).

It is further respectfully submitted that an application of a rubber cushion for the die 32 in Figure 7 would have been non-obvious to one of skill at the time the present invention was made. The rubber cushion 26 as taught by C '327 is fit for obtaining a half-product which roughly has the shape to be obtained, as shown in Figure 6. However, the formation of the final product with an exact formation of the tip, which occurs in Figure 7, is taught by the reference to require a metal die (column 2, lines 7-9). One of skill would find neither teaching nor motivation, from C '327 or C '393, to substitute or combine a rubber element with the metal die of Figure 7, nor would such a combination satisfy all the requirements of claim 16.

It is therefore respectfully submitted that claim 16 is not rendered obvious by the references C '327 and C '393, and therefore claim 16 is patentable. It is also respectfully submitted that claims depending from 16 are patentable at least for depending from a patentable claim.

It is further respectfully submitted that claim 22, as amended with the subject matter of claim 23, and claims depending therefrom, are patentable at least for the reasons set forth above as to claim 16.

Reconsideration and allowance of the claims are respectfully requested.

From the foregoing, it will be apparent that Applicant have fully responded to the October 16, 2008 Official Action and that the claims as presented are patentable. In view of this, Applicants respectfully request reconsideration of the claims, as presented, and their early passage to issue.

In order to expedite the prosecution of this case, it is requested that the Examiner telephone the attorney for Applicants at the number set forth below if the Examiner is of the opinion that further discussion of this case would be helpful.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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APPENDIX:

The Appendix includes the following item(s):

- ☒ - Replacement Sheets for Figures 2, 4 and 6 of the drawings